

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (Currently Amended) A compound of Formula I:

$$\mathbb{R}^4$$
  $\mathbb{X}_1$ 

in which:

 $X^{1}$  is  $-C(R^{1})(R^{2})X^{2}$  or  $-X^{3}$ ;

 $X^2 \text{ is cyano, -CHO, -C}(R^7)(R^8)R^5, -C(R^7)(R^8)CF_3, -C(R^7)(R^8)CF_2CF_2R^9$ 

-CH=CHS(O)<sub>2</sub> $\mathbb{R}^5$ , -C( $\mathbb{R}^7$ )( $\mathbb{R}^8$ )CF<sub>2</sub>C(O)N $\mathbb{R}^5$  $\mathbb{R}^6$ , -C( $\mathbb{R}^7$ )( $\mathbb{R}^8$ )C( $\mathbb{R}^7$ )( $\mathbb{R}^8$ )N $\mathbb{R}^5$  $\mathbb{R}^6$ ,

 $-C(R^7)(R^8)C(R^7)(R^8)OR^5$ ,  $-C(R^7)(R^8)CH_2OR^5$ ,  $-C(R^7)(R^8)CH_2N(R^6)SO_2R^5$ ,

 $-C(R^7)(R^8)C(R^7)(R^8)N(R^6)(CH_2)_2OR^6$ ,  $-C(R^7)(R^8)C(R^7)(R^8)N(R^6)(CH_2)_2NR^6$  or

 $-C(\mathbb{R}^7)(\mathbb{R}^8)C(\mathbb{R}^7)(\mathbb{R}^8)\mathbb{R}^5$ ; wherein  $\mathbb{R}^5$  is  $(C_{1-4})$ alkyl,  $(C_{6-10})$ aryl $(C_{0-6})$ alkyl,

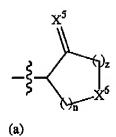
hetero( $C_{4-10}$ )aryl( $C_{0-6}$ )alkyl, ( $C_{4-10}$ )cycloalkyl( $C_{0-6}$ )alkyl or hetero( $C_{4-10}$ )cycloalkyl( $C_{0-6}$ )alkyl wherein hetero( $C_{4-10}$ )aryl or hetero( $C_{4-10}$ )cycloalkyl is pyran, thiopyran, pyrimidine, thiazole,

isothiazole, pyridine, furan, imidazole, isoxazole, oxadiazole, oxazole or triazole;  $R^6$  is hydrogen or  $(C_{1-6})$ alkyl;  $R^7$  is hydrogen or  $(C_{1-6})$ alkyl and  $R^8$  is hydroxy or  $R^7$  and  $R^8$  together

form oxo;  $R^9$  is hydrogen, halo,  $(C_{1-4})$ alkyl, or  $(C_{5-10})$ aryl $(C_{0-6})$ alkyl or

 $hetero(C_{5-10})aryl(C_{0-6})alkyl;$ 

X<sup>3</sup> represents a group of Formula (a):



in which n is 1 or 2, z is 0 or 1,  $X^5$  is selected from NR<sup>10</sup>, S or O, wherein R<sup>10</sup> is hydrogen or  $(C_{1-6})$ alkyl, and  $X^6$  is O, S or NR<sup>11</sup>, wherein R<sup>11</sup> is selected from hydrogen,  $(C_{1-6})$ alkyl,  $-X^4C(O)OR^{12}$ ,  $-X^4C(O)R^{13}$ ,  $-X^4C(O)NR^{12}R^{12}$ ,  $-X^4S(O)_2NR^{12}R^{12}$ ,  $-X^4S(O)_2R^{14}$ ,  $-R^{15}$ ,  $-X^4S(O)_2R^{15}$ ,  $-X^4C(O)R^{15}$ ,  $-X^4C(O)OR^{15}$ ,  $-X^4C(O)NR^{12}R^{15}$  and  $-X^4S(O)_2NR^{12}R^{15}$ , in which  $X^4$  is a bond or  $(C_{1-6})$ alkylene;  $R^{12}$  at each occurrence independently is hydrogen or  $(C_{1-6})$ alkyl;  $R^{13}$  is hydrogen,  $(C_{1-6})$ alkyl or halo-substituted $(C_{1-6})$ alkyl,  $R^{14}$  is  $(C_{1-6})$ alkyl or halo-substituted $(C_{1-6})$ alkyl and  $R^{15}$  is  $(C_{2-10})$ cycloalkyl $(C_{0-6})$ alkyl, hetero $(C_{3-10})$ aryl $(C_{0-6})$ alkyl, hetero $(C_{3-10})$ aryl $(C_{0-6})$ alkyl, or  $(C_{2-12})$ bicycloaryl $(C_{0-6})$ alkyl or hetero $(C_{3-12})$ bicycloaryl $(C_{0-6})$ alkyl;

wherein within X¹ any cycloalkyl, heterocycloalkyl, aryl or heteroaryl may be is substituted or unsubstituted with 1 radical R²²² selected from R¹⁵, X⁴OR¹⁵, X⁴SR³⁵, X⁴S(O)R¹⁵, X⁴S(O)R¹⁵, X⁴C(O)R¹⁵, X⁴C(O)OR¹⁵, X⁴OC(O)R¹⁵, X⁴NR¹⁵R¹², X⁴NR¹²S(O)₂R¹⁵, X⁴NR¹²S(O)₂R¹⁵, X⁴NR¹²S(O)₂R¹⁵, X⁴NR¹²S(O)₂R¹⁵, X⁴NR¹²S(O)₂R¹⁵, X⁴NR¹²S(O)₂R¹⁵, X⁴NR¹²S(O)₂R¹⁵, X⁴NR¹²S(O)₂R¹⁵, X⁴NR¹²S(O)₂R¹⁵, X⁴NR¹²C(O)NR¹⁵R¹², and Wherein X⁴ and R²³ may be substituted further with 1 to 5 radicals independently selected from (C₁ 6)alkyl, cyano, halo, halo substituted(C₁ 6)alkyl, nitro, X⁴NR¹²R¹², X⁴NR¹²C(O)R¹², X⁴NR¹²C(O)OR¹², X⁴NR¹²C(O)OR¹², X⁴NR¹²C(O)NR¹²R¹², X⁴NR¹²C(O)R¹², X⁴SR¹¹, X⁴C(O)OR¹², X⁴C(O)NR¹²R¹², X⁴C(O)NR¹²R¹², X⁴C(O)NR¹²R¹², X⁴SR¹³, X⁴NR¹²S(O)₂R¹³, X⁴P(O)(OR¹²)OR¹², X⁴OP(O)(OR¹²)OR¹², X⁴S(O)₂NR¹²R¹², X⁴NR¹²S(O)₂R¹⁴ wherein X⁴, R¹², R¹³, R¹³, R¹³ and R¹⁵ are as defined above:

R<sup>1</sup> and R<sup>2</sup> are both fluoro; or

 $R^{1} \text{ is hydrogen or } (C_{1-6}) \text{alkyl and } R^{2} \text{ is selected from the group consisting of hydrogen, } (C_{1-6}) \text{alkyl, cyano, } -X^{4}NR^{12}R^{12}, -X^{4}NR^{12}C(O)R^{12}, -X^{4}NR^{12}C(O)OR^{12}, -X^{4}NR^{12}C(O)NR^{12}R^{12}, -X^{4}NR^{12}C(O)R^{12}, -X^{4}NR^{12}C(O)R^{12}, -X^{4}NR^{12}C(O)R^{12}, -X^{4}NR^{12}C(O)R^{12}, -X^{4}NR^{12}C(O)R^{12}, -X^{4}C(O)R^{13}, -X^{4}C(O)R^{13}, -X^{4}C(O)R^{13}, -X^{4}C(O)NR^{12}R^{12}, -X^{4}S(O)_{2}NR^{12}R^{12}, -X^{4}NR^{12}S(O)_{2}R^{13}, -X^{4}P(O)(OR^{12})OR^{12}, -X^{4}OP(O)(OR^{12})OR^{12}, -X^{4}S(O)R^{14}, -X^{4}S(O)_{2}R^{14}, -R^{15}, -X^{4}OR^{15}, -X^{4}SR^{15}, -X^{4}S(O)R^{15}, -X^{4}S(O)R^{15}, -X^{4}C(O)R^{15}, -X^{4}OC(O)R^{15}, -X^{4}NR^{15}R^{12}, -X^{4}C(O)R^{15}, -X^{4}OC(O)R^{15}, -X^{4}OC(O)R$ 

-X<sup>4</sup>NR<sup>12</sup>C(O)R<sup>15</sup>, -X<sup>4</sup>NR<sup>12</sup>C(O)OR<sup>15</sup>, -X<sup>4</sup>C(O)NR<sup>15</sup>R<sup>12</sup>, -X<sup>4</sup>S(O)<sub>2</sub>NR<sup>15</sup>R<sup>12</sup>, -X<sup>4</sup>NR<sup>12</sup>S(O)<sub>2</sub>R<sup>15</sup>, -X<sup>4</sup>NR<sup>12</sup>C(O)NR<sup>15</sup>R<sup>12</sup> and -X<sup>4</sup>NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>15</sup>R<sup>12</sup>, wherein X<sup>4</sup>, R<sup>12</sup>, R<sup>13</sup>, R<sup>14</sup> and R<sup>15</sup> are as defined above; or R<sup>1</sup> and R<sup>2</sup> taken together with the carbon atom to which both R<sup>1</sup> and R<sup>2</sup> are attached form (C<sub>3-8</sub>)cycloalkylene or hetero(C<sub>3-8</sub>)cycloalkylene; wherein R<sup>2</sup>, and said cycloalkylene and said heterocycloalkylene may be substituted further with 1 to 3 radicals independently selected from (C<sub>1-6</sub>)alkyl, cyano, halo, halo-substituted(C<sub>1-4</sub>)alkyl, nitro, -X<sup>4</sup>NR<sup>12</sup>R<sup>12</sup>, -X<sup>4</sup>NR<sup>12</sup>C(O)R<sup>12</sup>, -X<sup>4</sup>NR<sup>12</sup>C(O)R<sup>12</sup>, -X<sup>4</sup>NR<sup>12</sup>C(O)NR<sup>12</sup>R<sup>12</sup>, -X<sup>4</sup>OC(O)R<sup>13</sup>, -X<sup>4</sup>OC(O)R<sup>13</sup>, -X<sup>4</sup>OC(O)R<sup>13</sup>, -X<sup>4</sup>C(O)NR<sup>12</sup>R<sup>12</sup>, -X<sup>4</sup>S(O)<sub>2</sub>NR<sup>12</sup>R<sup>12</sup>, -X<sup>4</sup>NR<sup>12</sup>S(O)<sub>2</sub>R<sup>13</sup>, -X<sup>4</sup>P(O)(OR<sup>12</sup>)OR<sup>12</sup>, -X<sup>4</sup>OC(O)R<sup>13</sup>, -X<sup>4</sup>OP(O)(OR<sup>12</sup>, -X<sup>4</sup>S(O)R<sup>14</sup> and -X<sup>4</sup>S(O)<sub>2</sub>R<sup>14</sup>, wherein X<sup>4</sup>, R<sup>12</sup>, R<sup>13</sup> and R<sup>14</sup> are as defined above;

R<sup>3</sup> and R<sup>4</sup> are independently -C(R<sup>16</sup>)(R<sup>17</sup>)X<sup>7</sup>, wherein R<sup>16</sup> and R<sup>17</sup> are hydrogen, (C<sub>1-6</sub>)alkyl or fluoro, or R<sup>16</sup> is hydrogen and R<sup>17</sup> is hydroxy and X<sup>7</sup> is selected from -X<sup>4</sup>NR<sup>12</sup>R<sup>12</sup>, -X<sup>4</sup>NR<sup>12</sup>C(O)R<sup>12</sup>, -X<sup>4</sup>NR<sup>12</sup>C(O)OR<sup>12</sup>, -X<sup>4</sup>NR<sup>12</sup>C(O)NR<sup>12</sup>R<sup>12</sup>, -X<sup>4</sup>OR(O)R<sup>13</sup>, -X<sup>4</sup>C(O)OR<sup>12</sup>, -X<sup>4</sup>C(O)R<sup>13</sup>, -X<sup>4</sup>OC(O)R<sup>13</sup>, -X<sup>4</sup>OC(O)R<sup>13</sup>, -X<sup>4</sup>C(O)NR<sup>12</sup>R<sup>12</sup>, -X<sup>4</sup>S(O)<sub>2</sub>NR<sup>12</sup>R<sup>12</sup>, -X<sup>4</sup>NR<sup>12</sup>S(O)<sub>2</sub>R<sup>13</sup>, -X<sup>4</sup>P(O)(OR<sup>12</sup>)OR<sup>12</sup>, -X<sup>4</sup>S(O)R<sup>15</sup>, -X<sup>4</sup>OP(O)(OR<sup>12</sup>)OR<sup>12</sup>, -X<sup>4</sup>S(O)R<sup>14</sup>, -X<sup>4</sup>S(O)<sub>2</sub>R<sup>14</sup>, -R<sup>15</sup>, -X<sup>4</sup>OR<sup>15</sup>, -X<sup>4</sup>SR<sup>15</sup>, -X<sup>4</sup>S(O)R<sup>15</sup>, -X<sup>4</sup>S(O)<sub>2</sub>R<sup>15</sup>, -X<sup>4</sup>C(O)R<sup>15</sup>, -X<sup>4</sup>C(O)R<sup>15</sup>, -X<sup>4</sup>OC(O)R<sup>15</sup>, -X<sup>4</sup>NR<sup>15</sup>R<sup>12</sup>, -X<sup>4</sup>NR<sup>12</sup>C(O)R<sup>15</sup>, -X<sup>4</sup>NR<sup>12</sup>C(O)R<sup>15</sup>, -X<sup>4</sup>NR<sup>12</sup>C(O)NR<sup>15</sup>R<sup>12</sup>, -X<sup>4</sup>S(O)<sub>2</sub>NR<sup>15</sup>R<sup>12</sup>, -X<sup>4</sup>NR<sup>12</sup>S(O)<sub>2</sub>R<sup>15</sup>, -X<sup>4</sup>NR<sup>12</sup>C(O)NR<sup>15</sup>R<sup>12</sup> and -X<sup>4</sup>NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>15</sup>R<sup>12</sup>, wherein X<sup>4</sup>, R<sup>12</sup>, R<sup>13</sup>, R<sup>14</sup> and R<sup>15</sup> are as defined above;

wherein within one of R³ or R⁴ any cycloalkyl, heterocycloalkyl, aryl or heteroaryl

may be is substituted or unsubstituted with 1-radical R²¹¹-selected from R¹⁵, X⁴OR¹⁵,

X⁴SR¹⁵, X⁴S(O)R¹⁵, X⁴S(O)R⁴⁵, X⁴C(O)R¹⁵, X⁴C(O)OR¹⁵, X⁴OC(O)R¹⁵, X⁴OC(O)R¹⁵, X⁴NR¹²SR¹²,

X⁴NR¹²C(O)R¹⁵, X⁴NR¹²C(O)OR¹⁵, X⁴C(O)NR¹²R¹⁵, X⁴S(O)NR¹⁵R¹³, mad R¹⁵ are as defined

&beve; and wherein each of R³, and R⁴ and R²¹-may be is substituted further or is not further

substituted with 1 to 5 radicals independently selected from (C₁₀)alkyl, eyano, halo,

halo substituted(C₁₄)alkyl, nitro, X⁴NR¹²R¹³, X⁴NR¹²C(O)R¹³, X⁴NR¹²C(O)OR¹²,

X⁴NR¹²C(O)NR¹²R¹², X⁴NR¹²C(NR¹²)NR¹³R¹², X⁴NR¹²C(O)R¹³, X⁴NR¹²C(O)OR¹²,

X⁴NR¹²C(O)NR¹²R¹², X⁴NR¹²C(NR¹²)NR¹²R¹², X⁴OR¹³, X⁴SR¹³, X⁴C(O)OR¹³,

X⁴C(O)R¹³, X⁴OC(O)R¹³, X⁴C(O)NR¹²R¹³, X⁴S(O)₃NR¹²R¹³, X⁴NR¹²S(O)₃R¹³,

X⁴P(O)(OR¹²)OR¹², X⁴OP(O)(OR¹²)OR¹², X⁴S(O)₃NR¹² and X⁴S(O)₃R¹⁴, wherein X⁴, R¹²,

R¹³ and R¹⁴ are as defined above; provided that only one bicyclic ring structure is present

within each of R³ or R⁴; and provided that when X² is cyano and X² within one of R³ or R⁴ is

-X<sup>4</sup>C(O)R<sup>13</sup> or -X<sup>4</sup>C(O)R<sup>15</sup>, wherein X<sup>4</sup> is a bond, then X<sup>7</sup> within the other of R<sup>3</sup> or R<sup>4</sup> is limited to -X<sup>4</sup>SR<sup>15</sup>, -X<sup>4</sup>S(O)R<sup>15</sup> and -X<sup>4</sup>S(O)<sub>2</sub>R<sup>15</sup>, wherein R<sup>15</sup> is a <u>substituted</u>

(C<sub>6-10</sub>)aryl(C<sub>1-6</sub>)alkyl <del>substituted with 1 to 5 radicals or hetero(C<sub>5-10</sub>)aryl(C<sub>0-6</sub>)alkyl optionally substituted with 1 to 5 radicals, wherein said radicals are independently selected from (C<sub>1-6</sub>)alkyl, cyano, halo, halo substituted(C<sub>1-4</sub>)alkyl, nitro, X<sup>4</sup>NR<sup>12</sup>R<sup>12</sup>, X<sup>4</sup>NR<sup>12</sup>C(O)R<sup>12</sup>, X<sup>4</sup>NR<sup>13</sup>C(O)R<sup>13</sup>, X<sup>4</sup>NR<sup>13</sup>C(O)NR<sup>12</sup>R<sup>12</sup>, X<sup>4</sup>NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>13</sup>R<sup>13</sup>, X<sup>4</sup>OR<sup>13</sup>, X<sup>4</sup>SR<sup>13</sup>, X<sup>4</sup>SR<sup>13</sup>, X<sup>4</sup>C(O)R<sup>13</sup>, X<sup>4</sup>C(O)R<sup>13</sup>, X<sup>4</sup>C(O)R<sup>13</sup>, X<sup>4</sup>C(O)R<sup>13</sup>, X<sup>4</sup>S(O)<sub>2</sub>NR<sup>12</sup>R<sup>13</sup>, X<sup>4</sup>S(O)<sub>2</sub>R<sup>14</sup>, X<sup>4</sup>S(O)<sub>2</sub>R<sup>14</sup>, X<sup>4</sup>P(O)(OR<sup>13</sup>)OR<sup>13</sup>, X<sup>4</sup>OP(O)(OR<sup>13</sup>)OR<sup>13</sup>, X<sup>4</sup>S(O)R<sup>14</sup> and X<sup>4</sup>S(O)<sub>2</sub>R<sup>14</sup>, wherein X<sup>4</sup>, R<sup>13</sup>, and R<sup>14</sup> are as defined above, provided that the radical is not selected from only halo when R<sup>15</sup> is (C<sub>6-10</sub>)aryl(C<sub>1-6</sub>)alkyl; and provided that when X<sup>2</sup> is eyano then X<sup>7</sup> within R<sup>3</sup> and R<sup>4</sup> is not X<sup>4</sup>C(O)NR<sup>13</sup>R<sup>13</sup>, X<sup>4</sup>C(O)NR<sup>15</sup>R<sup>13</sup> or X<sup>4</sup>C(O)NR<sup>18</sup>R<sup>19</sup>, wherein X<sup>4</sup> is a bond and R<sup>14</sup> and R<sup>15</sup> together with the nitrogen atom to which they are attached form hetero(C<sub>3-10</sub>)cycloalkyl or hetero(C<sub>5-10</sub>)aryl;</del>

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

2. (Currently Amended) The compound of Claim 1 in which:

$$X^{1}$$
 is  $-C(\mathbb{R}^{1})(\mathbb{R}^{2})X^{2}$  or  $-X^{3}$ ;

 $X^2$  is eyano, -CHO, -C(O)R<sup>5</sup>, -C(O)CF<sub>3</sub>, -C(O)CF<sub>2</sub>CF<sub>2</sub>R<sup>9</sup> -CH=CHS(O)<sub>2</sub>R<sup>5</sup>, -C(O)CF<sub>2</sub>C(O)NR<sup>5</sup>R<sup>6</sup>, -C(O)C(O)NR<sup>5</sup>R<sup>6</sup>, -C(O)C(O)OR<sup>5</sup>, -C(O)CH<sub>2</sub>OR<sup>5</sup>, -C(O)CH<sub>2</sub>OR<sup>5</sup>, -C(O)CH<sub>2</sub>N(R<sup>6</sup>)SO<sub>2</sub>R<sup>5</sup>, -C(O)C(O)N(R<sup>6</sup>)(CH<sub>2</sub>)<sub>2</sub>OR<sup>6</sup>, -C(O)C(O)N(R<sup>6</sup>)(CH<sub>2</sub>)<sub>2</sub>NR<sup>6</sup> or -C(O)C(O)R<sup>5</sup>, wherein R<sup>5</sup> is  $(C_{1-4})$ alkyl,  $(C_{6-10})$ aryl $(C_{0-6})$ alkyl, hetero $(C_{4-10})$ aryl $(C_{0-6})$ alkyl,  $(C_{4-10})$ cycloalkyl $(C_{0-6})$ alkyl or hetero $(C_{4-10})$ cycloalkyl, R<sup>6</sup> is hydrogen or  $(C_{1-6})$ alkyl and R<sup>9</sup> is halo:

X<sup>3</sup> represents a group of Formula (b):

in which n is 1 or 2, z is 0 or 1,  $X^6$  is O or  $NR^{11}$ , wherein  $R^{11}$  is selected from hydrogen,  $(C_{1-6})$ alkyl,  $-X^4OC(O)R^{13}$ ,  $-X^4C(O)OR^{12}$ ,  $-X^4C(O)R^{13}$ ,  $-X^4C(O)NR^{12}R^{12}$ ,  $-X^4S(O)_2NR^{12}R^{12}$ ,  $-X^4S(O)_2R^{14}$ ,  $-R^{15}$ ,  $-X^4S(O)_2R^{15}$ ,  $-X^4C(O)R^{15}$ ,  $-X^4C(O)OR^{15}$ ,  $-X^4C(O)NR^{12}R^{15}$  and  $-X^4S(O)_2NR^{12}R^{15}$ , in which  $X^4$  is a bond or  $(C_{1-6})$ alkylene;  $R^{12}$  at each occurrence independently is hydrogen or  $(C_{1-6})$ alkyl;  $R^{13}$  is hydrogen,  $(C_{1-6})$ alkyl or halo-substituted $(C_{1-6})$ alkyl,  $R^{14}$  is  $(C_{1-6})$ alkyl or halo-substituted $(C_{1-6})$ alkyl and  $R^{15}$  is  $(C_{3-10})$ cycloalkyl $(C_{0-6})$ alkyl, hetero $(C_{3-10})$ cycloalkyl $(C_{0-6})$ alkyl,  $(C_{9-12})$ bicycloaryl $(C_{0-6})$ alkyl or hetero $(C_{8-12})$ bicycloaryl $(C_{0-6})$ alkyl;

wherein within  $X^1$  any cycloalkyl, heterocycloalkyl, or aryl or heteroaryl may be is unsubstituted or substituted with 1 radical selected from -R<sup>15</sup> and -X<sup>4</sup>C(O)R<sup>15</sup>; and wherein  $X^1$  may be is unsubstituted or substituted further with 1 to 3 radicals independently selected from (C<sub>1-6</sub>)alkyl, halo-substituted(C<sub>1-4</sub>)alkyl, -X<sup>4</sup>NR<sup>12</sup>R<sup>12</sup>, -X<sup>4</sup>OR<sup>13</sup> and -X<sup>4</sup>S(O)<sub>2</sub>R<sup>14</sup>, wherein  $X^4$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$  and  $R^{15}$  are as defined above;

R1 and R2 are both fluoro; or

 $R^1$  is hydrogen or  $(C_{1-6})$ alkyl and  $R^2$  is selected from the group consisting of hydrogen,  $(C_{1-6})$ alkyl,  $-X^4OR^{13}$  and  $-R^{15}$ ; or  $R^1$  and  $R^2$  taken together with the carbon atom to which both  $R^1$  and  $R^2$  are attached form  $(C_{3-5})$ cycloalkylene or hetero $(C_{3-5})$ cycloalkylene; wherein  $R^2$  may be substituted further with  $(C_{1-6})$ alkyl; wherein  $X^4$ ,  $R^{13}$  and  $R^{15}$  are as defined above:

 $R^3$  and  $R^4$  are independently  $-C(R^{16})(R^{17})X^7$ , wherein  $R^{16}$  and  $R^{17}$  are hydrogen,  $(C_{1-6})$ alkyl or fluoro, or  $R^{16}$  is hydrogen and  $R^{17}$  is hydroxy and  $X^7$  is selected from  $-X^4SR^{13}$ ,  $-X^4C(O)R^{13}$ ,  $-X^4C(O)R^{12}R^{12}$ ,  $-R^{15}$ ,  $-X^4OR^{15}$ ,  $-X^4SR^{15}$ ,  $-X^4S(O)_2R^{15}$ ,  $-X^4C(O)R^{15}$  and  $-X^4C(O)NR^{15}R^{12}$ , wherein  $X^4$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{15}$  are as defined above;

wherein within one of  $R^3$  or  $R^4$  any cycloalkyl, heterocycloalkyl, aryl or heteroaryl may be substituted with 1 radical selected from  $-R^{15}$ ,  $-X^4OR^{15}$ ,  $-X^4SR^{15}$ ,  $-X^4S(O)R^{15}$ ,  $-X^4S(O)R^{15}$ ,  $-X^4C(O)R^{15}$ , wherein  $X^4$ ,  $X^{12}$  and  $X^{15}$  are as defined above; and wherein each of  $X^3$  and  $X^4$  may be substituted further with 1 to 5 radicals independently selected from  $(C_{1-6})$ alkyl, cyano, halo, halo-substituted  $(C_{1-4})$ alkyl, nitro,  $-X^4NR^{12}R^{12}$ ,  $-X^4NR^{12}C(O)R^{12}$ ,  $-X^4NR^{12}C(O)R^{12}$ ,  $-X^4NR^{12}C(O)R^{12}$ ,  $-X^4NR^{12}C(O)R^{12}$ ,  $-X^4C(O)R^{13}$ ,  $-X^4C($ 

 $-X^4C(O)NR^{12}R^{12}$ .  $-X^4S(O)NR^{12}R^{12}$ .  $-X^4NR^{12}S(O)R^{13}$ .  $-X^4P(O)(OR^{12})OR^{12}$  $-X^4OP(O)(OR^{12})OR^{12}$ ,  $-X^4S(O)R^{14}$  and  $-X^4S(O)_2R^{14}$ , wherein  $X^4$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{14}$  are as defined above:

wherein within one of R3 and R4 any cycloalkyl, heterocycloalkyl, or aryl or heteroaryl may be is unsubstituted or substituted with 1 radical selected from -R15 and -X4OR15; and wherein each of R<sup>3</sup> or R<sup>4</sup> may be is unsubstituted or substituted further by 1-5 radicals independently selected from (C1-6) alkyl, cyano, halo, halo-substituted(C1-4) alkyl, - $X^4NR^{12}C(O)OR^{12}$ ,  $-X^4OR^{13}$ ,  $-X^4C(O)OR^{12}$ ,  $-X^4C(O)R^{13}$ ,  $-X^4C(O)NR^{12}R^{12}$ ,  $-X^4NR^{12}S(O)R^{13}$ and  $-X^4S(O)_2R^{14}$ , wherein  $X^4$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$  and  $R^{15}$  are as defined above;

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

(Currently Amended) A compound of claim 2 in which R<sup>3</sup> and R<sup>4</sup> are independently 3.  $-CH_2X^7$ , wherein  $X^7$  is selected from  $X^4SR^{13}$ ,  $-X^4C(O)R^{13}$ ,  $-X^4C(O)NR^{12}R^{12}$ ,  $-R^{15}$ ,  $-X^4OR^{15}$ .  $-X^4SR^{15}$ ,  $-X^4S(O)_2R^{15}$ ,  $-X^4C(O)R^{15}$  and  $-X^4C(O)NR^{15}R^{12}$ , wherein  $X^4$  is a bond or  $(C_{1.6})$ alkylene,  $R^{12}$  at each occurrence independently is hydrogen or  $(C_{1.6})$ alkyl,  $R^{13}$  is hydrogen, (C<sub>1-6</sub>)alkyl or halo-substituted(C<sub>1-6</sub>)alkyl, R<sup>14</sup> is (C<sub>1-6</sub>)alkyl or halo-substituted(C<sub>1</sub>. 6) alkyl and  $\mathbb{R}^{15}$  is  $(C_{3-10})$  cycloalkyl $(C_{0-6})$  alkyl,  $(C_{3-10})$  cycloalkyl $(C_{0-6})$  alkyl, hetero  $(C_{3-10})$  cycloalkyl 10)cycloalkyl( $C_{0.5}$ )alkyl, ( $C_{6.10}$ )aryl( $C_{0.6}$ )alkyl, hetero( $C_{5.10}$ )aryl( $C_{0.6}$ )alkyl, or ( $C_{9.10}$ )aryl( $C_{0.6}$ )alkyl, hetero( $C_{5.10}$ )aryl( $C_{0.6}$ )alkyl, or ( $C_{9.10}$ ) <sub>12</sub>)bicycloaryl( $C_{0.6}$ )alkyl <del>or hetero( $C_{8.13}$ )bicycloaryl( $C_{0.6}$ )alkyl;</del> wherein within  $R^3$  and  $R^4$  any cycloalkyl, heterocycloalkyl, aryl or heteroaryl may be substituted with 1 radical selected from -R<sup>15</sup> and -X<sup>4</sup>OR<sup>15</sup>, wherein X<sup>4</sup> and R<sup>15</sup> are as defined above; and wherein R<sup>3</sup> and R<sup>4</sup> may be substituted further by 1 to 5 radicals independently selected from (C1-6) alkyl, cyano, halo, halo-substituted( $C_{1,4}$ )alkyl. - $X^4NR^{12}C(O)OR^{12}$ . - $X^4OR^{13}$ . - $X^4C(O)OR^{12}$ . - $X^4C(O)R^{13}$ .  $-X^4C(O)NR^{12}R^{12}$ ,  $-X^4NR^{12}S(O)_2R^{13}$  and  $-X^4S(O)_2R^{14}$ , wherein  $X^4R^{12}$ ,  $R^{13}$  and  $R^{14}$  are as defined above;

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

4. (Currently Amended) A compound of claim 3 in which R<sup>3</sup> is selected from 5-bromothiophen-2-ylmethyl, 3-cyclohexylpropyl, 2-cyclohexylpropyl, 2-cyclopentylpropyl, 3-phenylpropyl, 3-(2-difluoromethoxy)phenylpropyl, 2-phenylcyclopropylmethyl, 2,2-difluoro-3-phenylpropyl, 1-benzylcyclopropylmethy, 2-tetrahydro-pyran-4-ylethyl, 1-isobutylcyclopropylmethyl, thiophen-2-ylmethyl, tetrahydro-pyran-4-ylmethyl, cyclopropylmethylsulfanylmethyl, 2,2-dimethyl-3-phenylpropyl, 4-methyl-[1,2,5]thiadiazol-3-ylmethylsulfonylmethyl, 3-methyl-[1,2,4]thiadiazol-3-ylmethylsulfonylmethyl, thiophen-3ylmethylsulfonylmethyl, 3-methoxy-5-methyl-isoxazol-4-ylmethylsulfonylmethyl, 2,4dimethyl-thiazol-5-ylmethylsulfonylmethyl, 2-methyl-oxazol-4-ylmethylsulfonylmethyl, 2-methyl-thiazol-4-ylmethylsulfonylmethyl, 1,2,3]thiadiazol-4-ylmethylsulfonylmethyl, 3-methyl-[1,2,4]thiadiazol-5-ylmethylsulfonylmethyl, 4-methyl-[1,2,5]thiadiazol-3-ylmethylsulfonylmethyl, thiophen-3-ylmethylsulfonylmethyl, tetrahydropyran-4-yloxymethyl, piperidin-1-ylcarbonyl, thiophene-2-sulfonylmethyl, 3-chloro-2-fluoro-benzylsulfonylmethyl, benzenesulfonylmethyl, benzylsulfonylmethyl, 2-(1,1-difluoro-methoxy)-benzylsulfonylmethyl, 2-benzenesulfonyl-ethyl, 2-(pyridine-2-sulfonyl)-ethyl, 2-(pyridine-4-sulfonyl)-ethyl, 2-benzylsulfonyl-ethyl, oxy-pyridin-2-ylmethylsulfonylmethyl, prop-2-ene-1-sulfonylmethyl, 4-methoxy-benzylsulfonylmethyl, p-tolylmethylsulfonylmethyl, 4-chloro-benzylsulfonylmethyl, o-tolylmethylsulfonylmethyl, 3,5-dimethyl-benzylsulfonylmethyl, 4-trifluoromethyl-benzylsulfonylmethyl, 4-trifluoromethoxy-benzylsulfonylmethyl, 2-bromo-benzylsulfonylmethyl, pyridin-2-ylmethylsulfonylmethyl, pyridin-3-ylmethylsulfonylmethyl, pyridin-4-ylmethylsulfonylmethyl, naphthalen-2-ylmethylsulfonylmethyl, 3-methyl-benzylsulfonylmethyl, 3-trifluoromethyl-benzylsulfonylmethyl, 3-trifluoromethoxy-benzylsulfonylmethyl, 4-fluoro-2-trifluoromethoxy-benzylsulfonylmethyl, 2-fluoro-6-trifluoromethyl-benzylsulfonylmethyl, 3-chloro-benzylsulfonylmethyl, 2-fluoro-benzylsulfonylmethyl, 2-trifluoro-benzylsulfonylmethyl, 2-cyano-benzylsulfonylmethyl, 4-tert-butyl-benzylsulfonylmethyl, 2-fluoro-3-methyl-benzylsulfonylmethyl, 3-fluoro-benzylsulfonylmethyl, 4-fluoro-benzylsulfonylmethyl, 2-chloro-benzylsulfonylmethyl, 2,5-difluoro-benzylsulfonylmethyl, 2,6-difluoro-benzylsulfonylmethyl, 2,5-dichloro-benzylsulfonylmethyl, 3,4-dichloro-benzylsulfonylmethyl, 2-(1,1-difluoro-methoxy)-benzylsulfonylmethyl, 2-cyano-benzylsulfonylmethyl, 3-cyano-benzylsulfonylmethyl, 2-trifluoromethoxy-benzylsulfonylmethyl,

2,3-difluoro-benzylsulfonylmethyl, 2,5-difluoro-benzylsulfonylmethyl, biphenyl-2-ylmethylsulfonylmethyl, cyclohexylmethyl, 3-fluoro-benzylsulfonylmethyl, 3,4-difluoro-benzylsulfonylmethyl, 2,4-difluoro-benzylsulfonylmethyl, 2,4,6-trifluoro-benzylsulfonylmethyl, 2,4,5-trifluoro-benzylsulfonylmethyl, 2,3,4-trifluoro-benzylsulfonylmethyl, 2,3,5-trifluoro-benzylsulfonylmethyl, 2,5,6-trifluoro-benzylsulfonylmethyl, 2-chloro-5-trifluoromethylbenzylsulfonylmethyl, 2-methyl-propane-1-sulfonyl, 2-fluoro-3-trifluoromethylbenzylsulfonylmethyl, 2-fluoro-4-trifluoromethylbenzylsulfonylmethyl, 2-fluoro-5-trifluoromethylbenzylsulfonylmethyl, 4-fluoro-3-trifluoromethylbenzylsulfonylmethyl, 2-methoxy-benzylsulfonylmethyl, 3,5 bis-trifluoromethyl-benzylsulfonylmethyl, 4-difluoromethoxy-benzylsulfonylmethyl, 2-difluoromethoxy-benzylsulfonylmethyl, 3-difluoromethoxy-benzylsulfonylmethyl, 2,6-dichloro-benzylsulfonylmethyl, biphenyl-4-ylmethylsulfonylmethyl, 3,5-dimethyl-isoxazol-4-ylmethylsulfonylmethyl, 5-chloro-thiophen-2-ylmethylsulfonylmethyl, 2-[4-(1,1-Difluoro-methoxy)-benzenesulfonyl]-ethyl, 2-[2-(1,1-Diffuoro-methoxy)-benzenesulfonyl]-ethyl, 2-[3-(1,1-Difluoro-methoxy)-benzenesulfonyl]-ethyl, 2-(4-trifluoromethoxy-benzenesulfonyl)-ethyl, 2-(3-trifluoromethoxy-benzenesulfonyl)-ethyl, 2-(2-trifluoromethoxy-benzenesulfonyl)-ethyl, (cyanomethyl-methyl-carbamoyl)-methyl, biphenyl-3-ylmethyl, 2-oxo-2-pyrrolidin-1-yl-ethyl, 2-benzenesulfonyl-ethyl, isobutylsulfanylmethyl, 2-phenylsulfanyl-ethyl, cyclohexylmethylsulfonylmethyl,

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and- or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof-

2-cyclohexyl-ethanesulfonyl, benzyl, naphthalen-2-yl, benzylsulfanylmethyl,

2-trifluoromethyl-benzylsulfanylmethyl, phenylsulfanyl-ethyl and

(Currently Amended) A compound of claim 4 in which R<sup>4</sup> is selected from 5. 2-trifluorobenzylsulfonylmethyl, 3-phenylsulfanylpropyl, 4-chlorobenzylsulfonylmethyl, thiophen-2-ylsulfonylmethyl, benzylsulfonylmethyl, 4-methylbenzylsulfonylmethyl, 2-phenylsulfonylethyl, 2-pyridin-2-ylsulfonylethyl, 2-pyridin-4-ylsulfonylethyl,

cyclopropylmethylsulfonylmethyl;

2-benzylsulfonylethyl, 2-(3-difluoromethoxyphenylsulfonyl)ethyl, uaphthalen-2-ylmethylsulfonylmethyl, pyridin-2-ylmethylsulfonylmethyl, 3-methylbenzylsulfonylmethyl, 3-trifluoromethylbenzylsulfonylmethyl, 3-difluoromethoxybenzylsulfonylmethyl, 3-chlorobenzylsulfonylmethyl, 3-fluorobenzylsulfonylmethyl, 4-fluorobenzylsulfonylmethyl, 3-cyanobenzylsulfonylmethyl, 4-cyanobenzylsulfonylmethyl, 3,4-difluorobenzylsulfonylmethyl, benzylsulfonylmethyl, N-cyanomethyl-N-methylcarbamoylmethyl, 3-bromobenzyl, 4-phenylbutyl, 2,2-difluoro-3-phenylpropyl, 4'-methylsulfonylaminobiphenyl-3-ylmethyl, 4'-ethoxycarbonylaminobiphenyl-3-ylmethyl, 4-methylpiperazin-1-ylcarbonylmethyl, 1-fluoro-2-(4-methylpiperazin-1-yl)-2-oxoethyl, 1-hydroxy-4-methylpiperazin-1-yl-2-oxoethyl, 1-hydroxy-2-morpholin-4-yl-2-oxoethyl, 1-hydroxy-2-oxo-2-pyrrolidin-1-ylethyl, 1-fluoro-2-oxo-2-pyrrolidin-1-yl-ethyl, 1-fluoro-2-isopropylamino-2-oxoethyl, 1-hydroxy-2-isopropylamino-2-oxoethyl, 1-fluoro-2-oxo-2-piperazin-1-ylethyl, thiophen-3-ylmethylsulfonylmethyl, 4-methyl-[1,2,5]thiadiazol-3-ylmethylsulfonylmethyl, 3methoxy-5-methyl-isoxazol-4-ylmethylsulfonylmethyl, 2,4-dimethyl-thiazol-5ylmethylsulfonylmethyl, 2-methyl-oxazol-4-ylmethylsulfonylmethyl, 2-methylthiazol-4-ylmethylsulfonylmethyl, 2-([1,2,3]thiadiazol-4-ylmethylsulfonyl)-ethyl, 2-(3methyl-[1,2,4]thiadiazol-5-ylmethylsulfonyl)-ethyl, 2-oxo-2-phenyl-ethyl, 2-morpholin-4-yl-2-oxo-ethyl, 2-benzenesulfonyl-ethyl, 2-naphthalen-2-yl-2-oxo-ethyl, 2-benzo[1,3]dioxol-5-yl-2-oxo-ethyl, 2-benzo[b]thiophen-2-yl-2-oxo-ethyl, 2-biphenyl-4-yl-2-oxo-ethyl, 4-benzylsulfonylmethyl, 2-(3-trifluoromethoxy-benzenesulfonyl)-ethyl, 2-oxo-2-(4-phenoxy-phenyl)-ethyl, 2-(4-hydroxy-phenyl)-2-oxo-ethyl, benzylcarbamoyl-methyl, 4-acetyl-piperazine-1-carboxylic acid ethyl ester, cyclohexylcarbamoylmethyl, 2-(3-Chloro-benzo[b]thiophen-2-yl)-2-oxo-ethyl, benzenesulfonylmethyl, 2-oxo-2-thiophen-2-yl-ethyl, 2-oxo-2-thiophen-3-yl-ethyl, naphthalene-2-sulfonylmethyl, 2-(5-methyl-thiophen-2-yl)-2-oxo-ethyl, 2-(3-chloro-thiophen-2-yl)-2-oxo-ethyl, 5-methyl-thiophene-2-sulfonylmethyl, phenylcarbamoylmethyl, (5,6,7,8-tetrahydro-naphthalen-1-ylcarbamoyl)-methyl, (4-carbamoyl-phenylcarbamoyl)-methyl, (3-carbamoyl-phenylcarbamoyl)-methyl, (butyl-methyl-carbamoyl)-methyl, biphenyl-4-ylmethyl, 2-oxo-2-p-tolyl-ethyl, 2-(3-fluoro-4-methoxy-phenyl)-2-oxo-ethyl, 2-(4-chloro-phenyl)-2-oxo-ethyl, 2-(4-methoxy-phenyl)-2-oxo-ethyl, 2-oxo-2-(4-trifluoromethoxy-phenyl)-ethyl, 2-(3,4-difluoro-phenyl)-2-oxo-ethyl, 2-(3,4-dimethoxy-phenyl)-2-oxo-ethyl,

- 2-(4-fluoro-phenyl)-2-oxo-ethyl, 5-methyl-2-oxo-hexyl, 3,5-dimethyl-benzylsulfonylmethyl, 4-trifluoromethyl-benzylsulfonylmethyl; 4-trifluoromethoxy-benzylsulfonylmethyl, isopropylcarbamoyl-methyl, 4-dimethylcarbamoylmethyl, pyridin-4-ylcarbamoylmethyl, pyridin-4-ylmethylsulfonylmethyl, pyridin-3-ylmethylsulfonylmethyl, 3,4-dichloro-benzylsulfonylmethyl, pyridin-3-ylcarbamoylmethyl, 4-methoxy-benzylsulfonylmethyl, 4-chloro-benzylsulfonylmethyl, thiophene-2-sulfonylmethyl, benzylsulfonylmethyl, p-tolylmethylsulfonylmethyl, 2-benzenesulfonyl-ethyl, 2-(pyridine-2-sulfonyl)-ethyl, 2-(pyridine-4-sulfonyl)-ethyl, 2-benzylsulfonyl-ethyl, 2-[3-(1,1-Difluoro-methoxy)-benzenesulfonyl]-ethyl, naphthalen-2-ylmethylsulfonylmethyl, pyridin-2-ylmethylsulfonylmethyl, m-tolylmethylsulfonylmethyl, 3-trifluoromethyl-benzylsulfonylmethyl, 3-trifluoromethoxy-benzylsulfonylmethyl, 3-chloro-benzylsulfonylmethyl, 3-fluoro-benzylsulfonylmethyl, 4-fluoro-benzylsulfonylmethyl, 3-cyano-benzylsulfonylmethyl, 4-cyano-benzylsulfonylmethyl, 3,4-difluoro-benzylsulfonylmethyl, (cyanomethyl-methyl-carbamoyl)-methyl, 3-bromo-benzyl, 2-oxo-2-pyrrolidin-1-yl-ethyl, 2-(4'-chloro-biphenyl-4-yl)-2-oxo-ethyl, biphenyl-3-ylmethyl, 2-(1,1-difluoro-methoxy)-benzylsulfonylmethyl, 2-(4-methylsulfonylamino-phenyl)-2-oxo-ethyl, 2-oxo-2-piperidin-1-yl-ethyl, 2-(4-methylsulfonyl-piperazin-1-yl)-2-oxo-ethyl, 2-trifluoromethyl-benzylsulfonylmethyl, 4-fluoro-3-trifluoromethyl-benzylsulfonylmethyl, 4-carboxy-benzylsulfonylmethyl, 3.5-bis-trifluoromethyl-benzylsulfonylmethyl, 4-(1,1-difluoro-methoxy)-benzylsulfonylmethyl, 3-(1,1-difluoro-methoxy)-benzylsulfonylmethyl, 5-chloro-thiophen-2-ylmethylsulfonylmethyl, 2-[4-(1,1-difluoro-methoxy)-benzenesulfonyl]-ethyl, 2-(4-trifluoromethoxy-benzenesulfonyl)-ethyl, 2-phenylsulfanyl-ethyl, benzylsulfanylmethyl,
- and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

2-trifluoromethyl-benzylsulfanylmethyl, 2-trifluoromethoxy-benzylsulfanylmethyl,

2-cyclohexyl-ethyl and isobutylsulfanylmethyl;

SEP.-10. 2004 4:21PM

The compound of claim 5 in which  $R^1$  is hydrogen or  $(C_{1-6})$ alkyl and  $R^2$  is hydrogen,  $-X^4OR^{13}$ , hetero $(C_{5-10})$ aryl $(C_{0-6})$ alkyl,  $(C_{5-10})$ aryl $(C_{0-6})$ alkyl or  $(C_{1-6})$ alkyl; or  $R^1$  and  $R^2$  taken together with the carbon atom to which both  $R^1$  and  $R^2$  are attached form  $(C_{3-8})$ cycloalkylene or hetero $(C_{3-8})$ cycloalkylene; wherein the cycloalkylene or heterocycloalkylene are is optionally substituted with 1 to 3  $(C_{1-6})$ alkyl radicals;

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

7. (Currently Amended) The compound of claim 6 in which R<sup>1</sup> is hydrogen or methyl and R<sup>2</sup> is methoxymethyl, methoxyethyl, methyl, ethyl, propyl, butyl, phenethyl, hiophen-2-yl or 5-methyl-furan-2-yl; or R<sup>1</sup> and R<sup>2</sup> taken together with the carbon atom to which both R<sup>1</sup> and R<sup>2</sup> are attached form cyclopropyl, tetrahydro-pyran-4-yl or 1-methyl-piperidin-4-yl;

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

8. (Currently Amended) The compound of claim 7 of Formula I(a):

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

9. (Currently Amended) The compound of claim 8 selected from the group consisting of 3-biphenyl-3-yl-N-cyanomethyl-2-benzylsulfonylmethyl-propionamide; 3-biphenyl-4-yl-Ncyanomethyl-2-benzylsulfonylmethyl-propionamide; 3-(3-bromo-phenyl)-N-cyanomethyl-2benzylsulfonylmethyl-propionamide; N-cyanomethyl-3-(3-cyano-benzylsulfonyl)-2benzylsulfonyl-methyl-propionamide; N-cyanomethyl-2-[2-1,1-difluoro-methoxy)benzylsulfanylmethyl]-3-benzylsulfanyl-propionamide; N-cyanomethyl-3-(2-trifluoromethylbenzylsulfanyl)-2-(2-trifluoro-methyl-benzylsulfanylmethyl)-propionamide; N-cyanomethyl-3-isobutylsulfanyl-2-isobutylsulfanylmethyl-propionamide; N-cyanomethyl-4-phenylsulfanyl-2-(2-phenylsulfanyl-ethyl)-butyramide; N-cyanomethyl-3-[2-(1,1-difluoro-methoxy)benzylsulfanyl]-2-[2-(1,1-difluoro-methoxy)-benzylsulfanylmethyl]-propionamide; 3benzylsulfanyl-2-benzylsulfanylmethyl-N-cyanomethyl-propionamide; N-cyanomethyl-2-[2-1,1-diffuoro-methoxy)-benzylsulfonylmethyl]-3-benzylsulfonyl-propionamide; Ncyanomethyl-3-(2-trifluoromethyl-benzylsulfonyl)-2-(2-trifluoromethylbenzylsulfonylmethyl)-propionamide; 4-benzenesulfonyl-2-(2-benzenesulfonyl-ethyl)-Ncyanomethyl-butyramide; N-cyanomethyl-3-[2-(1,1-difluoro-methoxy)-benzylsulfonyl]-2-[2-(1,1-difluoro-methoxy)-benzylsulfonylmethyl]-propionamide; N-cyanomethyl-3benzylsulfonyl-2-benzylsulfonylmethyl-propionamide; N-cyanomethyl-3-(2-methyl-propane-1-sulfonyl)-2-(2-methyl-propane-1-sulfonylmethyl)-propionamide; N-cyanomethyl-3-(2methyl-thiazol-4-ylmethylsulfonyl)-2-benzyl-sulfonylmethyl-propionamide; 3-biphenyl-3-yl-N-cyanomethyl-2-[2-(1,1-difluoro-methoxy)-benzyl-sulfonylmethyl]-propionamide; (3'-{2-(cyanomethyl-carbamoyl)-3-[2-(1,1-difluoro-methoxy)-benzyl-sulfonyl]-propyl}-biphenyl-4yl)-carbamic acid ethyl ester; N-cyanomethyl-2-[2-(1,1-difluoro-methoxy)benzylsulfonylmethyl]-3-(4'-methylsulfonylamino-biphenyl-3-yl)-propionamide; 3-(3-bromophenyl)-N-cyanomethyl-2-[2-(1,1-difluoro-methoxy)-phenyl-methylsulfonylmethyl]propionamide; N-cyanomethyl-2-((E)-3-phenyl-allyl)-3-benzylsulfonyl-propionamide; and Ncyanomethyl-3-benzylsulfonyl-2-(3-phenyl-propyl)-propionamide;

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

10. (Currently Amended) The compound of Claim 7 of Formula I(b):

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

11. (Currently Amended) The compound of claim 10 in which R<sup>5</sup> is 1*H*-benzoimidazol-2-yl, benzooxazol-2-yl, oxazolo[4,5-b]pyridin-2-yl, benzothiazol-2-yl, 5-phenyl-[1,3,4]oxadiazol-2-yl, 5-pyridin-3-yl-[1,3,4]oxadiazol-2-yl, 5-pyridazin-3-yl-[1,3,4]oxadiazol-2-yl, pyrimidin-2-yl, pyridazin-3-yl, 3-penyl-[1,2,4]oxadiazol-5-yl, 5-methoxymethyl-[1,3,4]oxadiazol-2-yl, 5-ethyl-[1,3,4]oxadiazol-2-yl,, 1,3,4]thiadiazol-2-yl, benzyloxycarbonyl, benzyloxydicarbonyl, phenyldicarbonyl, 5-methyl-[1,3,4]thiadiazol-2-yl, 5-trifluoromethyl-[1,3,4]oxadiazol-2-yl, 5-methyl-[1,3,4]oxadiazol-2-yl, 5-methyl-[1,2,4]oxadiazol-3-yl, 5-phenyl-[1,2,4]oxadiazol-3-yl, 5-thiophen-3-yl-[1,2,4]oxadiazol-3-yl, 5-trifluoromethyl-[1,2,4]oxadiazol-3-yl, 3-methyl-[1,2,4]oxadiazol-5-yl or 3-pyrazin-2-yl;

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

12. (Currently Amended) The compound of claim 11 selected from the group consisting of N-[(S)-1-(1-Benzooxazol-2-yl-methanoyl)-butyl]-3-benzylsulfonyl-2-benzylsulfonylmethyl-propionamide; N-[(S)-1-(1-Benzooxazol-2-yl-methanoyl)-butyl]-3-(2-trifluoromethyl-benzylsulfonylmethyl)-propionamide; N-[(S)-1-(1-Benzooxazol-2-yl-methanoyl)-pentyl]-4-(2-methoxy-benzenesulfonyl)-2-[2-(2-methoxy-benzenesulfonyl)-ethyl]-butyramide; 4-Benzenesulfonyl-2-(2-benzenesulfonyl-ethyl)-N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-butyl]-butyramide; (R)-N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-butyl]-2-cyclohexylmethyl-3-benzylsulfonyl-propionamide; N-[(S)-1-(1-benzoothiazol-2-yl-methanoyl)-propyl]-4-morpholin-4-yl-4-oxo-2-benzylsulfonylmethyl-

butyramide; N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-butyl]-3-cyclohexyl-2cyclohexylmethyl-propionamide; N-[(S)-1-(1-Benzooxazol-2-yl-methanoyl)-butyl]-3isobutylsulfanyl-2-isobutylsulfanylmethyl-propionamide; N-[(S)-1-(1-benzooxazol-2-ylmethanoyl)-butyl]-3-benzylsulfanyl-2-benzylsulfanylmethyl-propionamide; N-[(S)-1-(1benzooxazol-2-yl-methanoyl)-butyl]-4-phenylsulfanyl-2-(2-phenylsulfanyl-ethyl)-butyramide; N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-4-morpholin-4-yl-4-oxo-2benzylsulfonylmethyl-butyramide; N-[(S)-1-(1-Benzooxazol-2-yl-methanoyl)-pentyl]-4morpholin-4-yl-4-oxo-2-benzylsulfonylmethyl-butyramide; 4-Morpholin-4-yl-4-oxo-2benzylsulfonylmethyl-N-{(S)-1-[1-(3-phenyl-[1,2,4]oxadiazol-5-yl)-methanoyl]-propyl}butyramide; N-[(S)-1-(1-Benzooxazol-2-yl-methanoyl)-butyl]-2-[2-(1,1-difluoro-methoxy)benzylsulfonylmethyl]-3-benzylsulfonyl-propionamide; 4-Morpholin-4-yl-4-oxo-N-[1-(2-oxo-2-phenyl-acetyl)-pentyl]-2-benzylsulfonylmethyl-butyramide; N-(1,1-Dimethyl-2oxazolo[4,5-b]pyridin-2-yl-2-oxo-ethyl)-4-morpholin-4-yl-4-oxo-2-benzylsulfonylmethylbutyramide; N-[1-(5-Ethyl-[1,3,4]oxadiazole-2-carbonyl)-butyl]-4-morpholin-4-yl-4-oxo-2benzylsulfonylmethyl-butyramide; N-[1-(5-Ethyl-[1,3,4]oxadiazole-2-carbonyl)-butyl]-4-oxo-2-benzylsulfonyl-methyl-4-piperidin-1-yl-butyramide; N-[1-(5-Ethyl-[1,3,4]oxadiazole-2carbonyl)-butyl]-4-oxo-2-benzylsulfonyl-methyl-4-pyrrolidin-1-yl-butyramide; N-[1-(5-Methoxymethyl-[1,3,4]oxadiazole-2-carbonyl)-propyl]-4-morpholin-4-yl-4-oxo-2benzylsulfonylmethyl-butyramide; N-[1-(5-Methoxymethyl-[1,3,4]oxadiazole-2-carbonyl)propyl]-4-oxo-2-benzylsulfonylmethyl-4-piperidin-1-yl-butyramide; N-[1-(5-Methoxymethyl-[1,3,4]oxadiazole-2-carbonyl)-propyl]-4-oxo-2-benzylsulfonylmethyl-4-pyrrolidin-1-ylbutyramide; 4-Morpholin-4-yl-4-oxo-2-benzylsulfonylmethyl-N-[1-(5-phenyl-[1,3,4]oxadiazole-2-carbonyl)-propyl]-butyramide; 4-Oxo-2-benzylsulfonylmethyl-N-[1-(5phenyl-[1,3,4]oxadiazole-2-carbonyl)-propyl]-4-piperidin-1-yl-butyramide, 4-Oxo-2benzylsulfonylmethyl-N-[1-(5-phenyl-[1,3,4]oxadiazole-2-carbonyl)-propyl]-4-pyrrolidin-1yl-butyramide; 4-Morpholin-4-yl-N-[1-(oxazolo[4,5-b]pyridine-2-carbonyl)-propyl]-4-oxo-2benzylsulfonylmethyl-butyramide; N-[1-(Oxazolo[4.5-b]pyridine-2-carbonyl)-propyl]-4-oxo-2-benzylsulfonyl-methyl-4-piperidin-1-yl-butyramide; N-[1-(Oxazolo[4,5-b]pyridine-2carbonyl)-propyl]-4-oxo-2-benzylsulfonyl-methyl-4-pyrrolidin-1-yl-butyramide; 4-Morpholin-4-yl-4-oxo-2-benzylsulfonylmethyl-N-[1-(5-pyridin-4-yl-[1,3,4]oxadiazole-2carbonyl)-propyl]-butyramide; 4-Oxo-2-benzylsulfonylmethyl-4-piperidin-1-yl-N-[1-(5pyridin-4-yl-[1,3,4]oxadiazole-2-carbonyl)-propyl]-butyramide; 4-Oxo-2benzylsulfonylmethyl-N-[1-(5-pyridin-4-yl-[1,3,4]oxadiazole-2-carbonyl)-propyl]-4pyrrolidin-1-yl-butyramide; 4-Morpholin-4-yl-4-oxo-2-benzylsulfonylmethyl-N-[1-(5-pyridin-

3-yl-[1,3,4]oxadiazole-2-carbonyl)-propyl]-butyramide; N-[1-(Benzooxazole-2-carbonyl)propyl]-4-oxo-2-benzylsulfonylmethyl-4-piperidin-1-yl-butyramide; N-[1-(Benzooxazole-2carbonyl)-propyl]-4-oxo-2-benzylsulfonylmethyl-4-pyrrolidin-1-yl-butyramide: N-[1-(Benzooxazole-2-carbonyl)-propyl]-2-cyclohexylmethyl-4-morpholin-4-yl-4-oxo-butyramide; 2-Cyclohexylmethyl-4-morpholin-4-yl-N-[1-(oxazolo[4,5-b]pyridine-2-carbonyl)-propyl]-4oxo-butyramide; 2-Cyclohexylmethyl-N-[1-(5-ethyl-[1,3,4]oxadiazole-2-carbonyl)-butyl]-4morpholin-4-yl-4-oxo-butyramide; N-(2-Benzooxazol-2-yl-1-methoxymethyl-2-oxo-ethyl)-2-(2-difluoromethoxy-benzylsulfonylmethyl)-4-morpholin-4-yl-4-oxo-butyramide; N-(1-(Benzooxazole-2-carbonyl)-propyl]-2-(2-cyclohexyl-ethyl)-4-morpholin-4-yl-4-oxobutyramide; 2-(2-Cyclohexyl-ethyl)-4-morpholin-4-yl-N-[1-(oxazolo[4,5-b]pyridine-2carbonyl)-propyl]-4-oxo-butyramide; 2-(2-Cyclohexyl-ethyl)-4-moxpholin-4-yl-4-oxo-N-[1-(5-phenyl-[1,3,4]oxadiazole-2-carbonyl)-propyl]-butyramide; 2-(2-Difluoromethoxybenzylsulfonylmethyl)-4-morpholin-4-yl-4-oxo-N-[1-(5-phenyl-[1,3,4]oxadiazole-2carbonyl)-propyl]-butyramide; 2-(2-Difluoromethoxy-benzylsulfonylmethyl)-N-[1-(5-ethyl-[1,3,4]oxadiazole-2-carbonyl)-butyl]-4-morpholin-4-yl-4-oxo-butyramide; N-[1-(Benzooxazole-2-carbonyl)-propyl]-2-(2-difluoromethoxy-benzyl-sulfonylmethyl)-4morpholin-4-yl-4-oxo-butyramide;

2-(2-Morpholin-4-yl-2-oxo-ethyl)-5-phenyl-pentanoic acid, 1-(benzooxazole-2carbonyl)-propyl]-amide; (R)-2-Cyclohexylmethyl-4-morpholin-4-yl-4-oxo-N-[(S)-1-(5phenyl-1,2,4-oxadiazole-3-carbonyl)-propyl]-butyramide; 2-(2-Morpholin-4-yl-2-oxo-ethyl)-5-phenyl-pentanoic acid, (S)-1-(5-phenyl-[1,2,4]oxadiazole-3-carbonyl)-propyl]-amide; 4-Morpholin-4-yl-4-oxo-2-benzylsulfonylmethyl-N-[(S)-1-(5-phenyl-1,2,4-oxadiazole-3carbonyl)-propyl]-butyramide; (R)-2-Cyclohexylmethyl-4-morpholin-4-yl-4-oxo-N-[(S)-1-(3phenyl-1,2,4-oxadiazole-5-carbonyl)-propyl]-butyramide; 4-Morpholin-4-yl-N-[1-(oxazole-2carbonyl)-3-phenyl-propyl]-4-oxo-2-benzylsulfonylmethyl-butyramide; N-(1,1-Dimethyl-2oxazol-2-yl-2-oxo-ethyl)-4-morpholin-4-yl-4-oxo-2-benzylsulfonylmethyl-butyramide; N-4-Isopropyl-N-1-[1-(oxazole-2-carbonyl)-3-phenyl-propyl]-2-benzylsulfonylmethylsuccinamide; 2-(2-Difluoromethoxy-benzylsulfonylmethyl)-4-morpholin-4-yl-N-[1-(oxazole-2-carbonyl)-3-phenyl-propyl]-4-oxo-butyramide; 2-(2-Methyl-propane-1-sulfonylmethyl)-4morpholin-4-yl-N-[1-(oxazole-2-carbonyl)-3-phenyl-propyl]-4-oxo-butyramide; 2-Cyclopropylmethylsulfonylmethyl-4-morpholin-4-yl-N-[1-(oxazole-2-carbonyl)-3-phenylpropyl]-4-oxo-butyramide; N-[1-(Benzooxazole-2-carbonyl)-butyl]-2-benzylsulfonyl-3-(tetrahydro-pyran-4-yloxymethyl)-propionamide; N-[1-(Benzooxazole-2-carbonyl)-butyl]-3ethanesulfonyl-2-(tetrahydro-pyran-4-yloxymethyl)-propionamide; N-(1-Benzenesulfonyl-3-

oxo-azepan-4-yl)-2-cyclopropylmethylsulfonyl-methyl-4-morpholin-4-yl-4-oxo-butyramide; 2-Cyclopropylmethylsulfonylmethyl-N-{(S)-1-[(R)-hydroxy-(3-phenyl-1,2,4-oxadiazol-5-yl)methyl]-propyl}-4-morpholin-4-yl-4-oxo-butyramide; N-{(S)-1-[(R)-hydroxy-(3-phenyl-1,2,4-oxadiazol-5-yl)-methyl]-propyl}-2-(2-methyl-propane-1-sulfonylmethyl)-4-morpholin-4-yl-4-oxo-butyramide; 2-(2-Morpholin-4-yl-2-oxo-ethyl)-5-phenyl-pentanoic acid {(S)-1-[(R)-hydroxy-(3-phenyl-1,2,4-oxadiazol-5-yl)-methyl]-propyl}-amide; 2-Cyclopropylmethylsulfonylmethyl-4-morpholin-4-yl-4-oxo-N-[(S)-1-(3-phenyl-1,2,4oxadiazole-5-carbonyl)-propyl]-butyramide; 2-(2-methyl-propane-1-sulfonylmethyl)-4morpholin-4-yl-4-oxo-N-[(S)-1-(3-phenyl-1,2,4-oxadiazole-5-carbonyl)-propyl]-butyramide; 2-(2-Morpholin-4-yl-2-oxo-ethyl)-5-phenyl-pentanoic acid, (S)-1-(3-phenyl-1,2,4-oxadiazole-5-carbonyl)-propyl}-amide; N-[(1S)-1-(Benzooxazol-2-yl-hydroxy-methyl)-3-phenyl-propyl]-2-cyclopropylmethylsulfonylmethyl-4-morpholin-4-yl-4-oxo-butyramide; (R)-2-((S)-1-Hydroxy-2-morpholin-4-yl-2-oxo-ethyl)-5-phenyl-pentanoic acid, 1-(benzoxazole-2carbonyl)-propyl]-amide; (R)-5-(2-Difluoromethoxy-phenyl)-2-((S)-1-hydroxy-2-morpholin-4-yl-2-oxo-ethyl)-pentanoic acid, 1-(benzoxazole-2-carbonyl)-propyl]-amide; and 4-Morpholin-4-yl-N-[1-(oxazole-2-carbonyl)-cyclopropyl]-4-oxo-2-benzylsulfonyl methyl butyramide;

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

## 13. (Currently Amended) The compound of claim 7 of Formula I(c):

$$X^7CH_2$$
 $R^1$ 
 $R^2$ 
 $SO_2R^5$ 
 $I(c)$ 

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

- 14. (Currently Amended) The compound of claim 13 in which R<sup>5</sup> is phenyl;
- and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.
- 15. (Currently Amended) The compound of claim 14 selected from the group consisting of N-[(\$)-1-((E)-2-benzenesulfonyl-vinyl)-pentyl]-3-benzylsulfonyl-2-benzylsulfonylmethylpropionamide and N-(3-benzenesulfonyl-1-phenethyl-allyl)-3-benzylsulfonyl-2benzylsulfonylmethyl-propionamide;

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

16. (Currently Amended) The compound of claim 7 of Formula I(d):

$$X^7CH_2$$
 $R^1$ 
 $R^2$ 
 $R^6$ 
 $R^6$ 

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

(Currently Amended) The compound of claim 16 in which R5 is phenyl and R6 is 17. hydrogen;

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected

derivatives, individual isomers and mixtures of isomers thereof.

18. (Currently Amended) The compound of claim 17 namely *N*-(3-benzenesulfonylamino-2-oxo-propyl)-4-morpholin-4-yl-4-oxo-2-benzylsulfonylmethyl-butyramide;

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

19. (Currently Amended) The compound of claim 7 of Formula I(e):

$$X^7CH_2$$
 $R^1$ 
 $R^2$ 
 $F$ 
 $R^5$ 
 $I(e)$ 

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

- 20. (Currently Amended) The compound of claim 19 in which R<sup>5</sup> and R<sup>6</sup> is methyl; and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.
- 21. (Currently Amended) The compound of claim 20 in which one X<sup>7</sup> is morpholine-4-carbonyl and the other is benzylsulfonyl, R<sup>1</sup> is hydrogen and R<sup>2</sup> is ethyl, namely (S)-2,2-difluoro-4-(4-morpholin-4-yl-4-oxo-2-benzylsulfonylmethyl-butanoylamino)-3-oxo-hexanoic acid dimethylamide;

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and

solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof,

22. (Currently Amended) The compound of claim 7 of Formula I(f):

$$X^7CH_2$$
 $CH_2X^7$ 
 $H$ 
 $N$ 
 $R^5$ 
 $N$ 
 $R^6$ 
 $I(f)$ 

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

23. (Currently Amended) The compound of claim 22 in which R<sup>5</sup> is methyl, benzyl, phenethyl, cyclohexyl, methoxyethyl, dimethylaminoethyl, tetrahydro-pyran-4-yl, 1-methylsulfonyl-piperidin-4-yl, 4-methyl-piperazin-1-yl, morpholin-4-ylethyl, pyridin-2-yl, pyridin-2-ylmethyl or oxazol-2-ylmethyl; R<sup>6</sup> is hydrogen or methyl; or R<sup>5</sup> and R<sup>6</sup> together with the nitrogen atom to which both R<sup>5</sup> and R<sup>6</sup> are attached form morpholine-4-yl, pyrrolidin-1-yl, 4-dimethylamino-piperazin-1-yl, 4-hydroxy-piperazin-1-yl, 4-pyridin-2-yl-piperazin-1-yl, 4-benzoyl-piperazin-1-yl or 3-oxo-piperazin-1-yl;

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

24. (Currently Amended) The compound of claim 23 selected from the group consisting of N-[(S)-1-(1-Benzylcarbamoyl-methanoyl)-propyl]-3-benzylsulfonyl-2-benzylsulfonylmethyl-propionamide and N-[(S)-1-(1-Benzylcarbamoyl-methanoyl)-propyl]-4-morpholin-4-yl-4-oxo-2-benzylsulfonylmethyl-butyramide;

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and

solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

25. (Currently Amended) The compound of claim 7 of Formula I(g):

$$X^7CH_2$$
 $I(g)$ 
 $CH_2X^7$ 
 $H$ 
 $X^3$ 

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

26. (Currently Amended) The compound of claim 25 in which X³ is 1-benzoyl-4-oxopyrrolidin-3-yl, 4-oxo-pyrrolidin-3-yl-1-carboxylic acid tert-butyl ester, 2-methyl-4-oxotetrahydro-furan-3-yl, 2-ethyl-4-oxotetrahydro-furan-3-yl, 4-oxotetrahydro-furan-3-yl, 2-acetoxy-4-oxo-azetidin-3-yl, 1-isopropyl-3-oxo-azepan-4-yl, 3-oxo-azepan-4-yl-1-carboxylic acid benzyl ester, 3-oxo-azepan-4-yl-1-carboxylic acid tert-butyl ester, 1-benzoyl-3-oxo-azepan-4-yl, 1-isobutyryl-3-oxo-azepan-4-yl, 3-oxo-1-(propane-2-sulfonyl)-azepan-4-yl, 1-benzenesulfonyl-3-oxo-azepan-4-yl, 1-benzenesulfonyl-3-oxo-pyrrolidin-3-yl, 1-benzoyl-3-oxo-piperidin-4-yl or 3-oxo-tetrahydro-pyran-4-yl;

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

27. (Currently Amended) The compound of claim 23 selected from the group consisting of 3-Hydroxy-4-(4-morpholin-4-yl-4-oxo-2-benzylsulfonylmethyl-butyrylamino)-azepane-1-carboxylic acid tert-butyl ester; 4-(2-Cyclopropylmethylsulfonylmethyl-4-morpholin-4-yl-4-oxo-butyrylamino)-3-hydroxy-azepane-1-carboxylic acid tert-butyl ester; 3-Hydroxy-4-[2-(2-cyclopropylmethylsulfonylmethyl-4-morpholin-4-yl-4-oxo-butyrylamino)-3-hydroxy-azepane-1-carboxylic acid tert-butyl ester; 3-Hydroxy-4-[2-(2-cyclopropylmethyl-4-morpholin-4-yl-4-oxo-butyrylamino)-3-hydroxy-azepane-1-carboxylic acid tert-butyl ester; 3-Hydroxy-4-[2-(2-cyclopropylmethyl-4-morpholin-4-yl-4-morpholin-4-yl-4-morpholin-4-yl-4-morpholin-4-yl-4-morpholin-4-yl-4-morpholin-4-yl-4-oxo-butyrylamino)-3-hydroxy-4-[2-(2-cyclopropylmethyl-4-morpholin-4-yl-4-morpholin-4-yl-4-morpholin-4-yl-4-morpholin-4-yl-4-morpholin-4-yl-4-morpholin-4-yl-4-oxo-butyrylamino)-3-hydroxy-4-[2-(2-cyclopropylmethyl-4-morpholin-4-yl-

carboxylic acid tert-butyl ester; 4-(2-Cyclopropylmethylsulfonylmethyl-4-morpholin-4-yl-4-oxo-butyrylamino)-3-oxo-azepane-1-carboxylic acid tert-butyl ester; 4-[2-(2-Methyl-propane-1-sulfonylmethyl)-4-morpholin-4-yl-4-oxo-butyrylamino]-3-oxo-azepane-1-carboxylic acid tert-butyl ester; N-(1-Benzenesulfonyl-3-oxo-azepan-4-yl)-4-morpholin-4-yl-4-oxo-2-benzylsulfonylmethyl-butyramide; N-(1-Benzenesulfonyl-3-oxo-azepan-4-yl)-2-(2-methyl-propane-1-sulfonylmethyl)-4-morpholin-4-yl-4-oxo-butyramide; 3-(4-Morpholin-4-yl-4-oxo-2-benzylsulfonylmethyl-butyrylamino)-4-oxo-pyrrolidine-1-carboxylic acid tert-butyl ester; 4-(4-Morpholin-4-yl-4-oxo-2-benzylsulfonylmethyl-butyrylamino)-3-oxo-azepane-1-carboxylic acid benzyl ester; and acetic acid (2S,3S)-3-(4-morpholin-4-yl-4-oxo-2-benzylsulfonylmethyl-butanoylamino)-4-oxo-azetidin-2-yl ester;

and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and or the pharmaceutically acceptable salts and solvates of such compounds and or the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

- 28. (Original) A pharmaceutical composition comprising a therapeutically effective amount of a compound of Claim 1 in combination with a pharmaceutically acceptable excipient.
- 29. (Original) A method for treating a disease in an animal in which inhibition of Cathepsin S can prevent, inhibit or ameliorate the pathology and/or symptomology of the disease, which method comprises administering to the animal a therapeutically effective amount of compound of Claim 1 or a N-oxide derivative or individual isomer or mixture of isomers thereof; or a pharmaceutically acceptable salt or solvate of such compounds and the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.
- 30. (Canceled).
- 31. (Canceled).